August 2, 1946.

Dear Francis:

Ed has suggested that I might be able to get credit towards my Ph.D. here, on the basis of my medical school work, and the work on Neurospora that I did with you. It might work, but he thought that it was a ticklish business and that the better or more complete references were supplied, the more likely the attempt to succeed. Could you do the very great favor of sending a thorough opinion of my qualifications for a doctorate in microbiology or genetics to Dean Hartley Simpson, Yale University Graduate School, New Haven, Ct. ? The sex in bacteria stuff would then be my thesis. I have to emphasize the extra-curricular (extra P+S) work that I did.

More recombinations are coming in; we have now the four recombination classes for two pairs of characters : B-R-, B-R+, B+R- and B+R+, although in this cross, B-R- and B+R+ were parts of the parental types. But the same thing now for T-R+ and T+R- where T- is threonineless, B- biotinless and R+ resistance to Tl. Also one more biochemical recombination : B-T- (3 times) from B-ϕ-C- X T-P-. We have previously gotten B-P- from the same cross. There is not random recombination of all characters, and our failure thusfar to isolate some of the other types can be accounted for, by linkage, or possible selective factors, but there is a real deficiency. Statistical analysis so far suggests two linkage groups: threonineless being in one, B, M, P, ϕ, C, and T in the other along with R. This is jumping a little rapidly however. Y9 threonine-leucine-'methionine-less' is actually a pab-less; our old pab was evidently impure and inhibitory. Also a pab-less in B/r. (Arginine-methionineless X Histidine-pabless in B/r have given no prototrophs.)

Regards to all, hoping to see you in a few weeks,